WHAT IS CLAIMED IS:

1. A phosphor thin film comprising:

a matrix material expressed by a composition formula $A_xB_yO_wS_z$,

A representing at least one element selected from the group consisting of Mg, Ca, Sr, Ba, and Zn,

B representing at least one element selected from the group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu,

molar ratios being respectively set as $0 < x < 5$, $0 < y < 4$, $0 \leq z < 8$, and $0 \leq w < 8$, and

$0 = z = w$ never holding true, and

a substance functioning as a luminescence center in the matrix material.

2. The phosphor thin film according to claim 1,

wherein the substance functioning as the luminescence center is any of Mn and a Mn compound.

3. The phosphor thin film according to claim 1,

wherein the substance functioning as the luminescence center is any of Eu and a Eu compound.

4. The phosphor thin film according to claim 1,

wherein the substance functioning as the luminescence center is any of Ce and a Ce compound.

5. The phosphor thin film according to claim 1,

wherein the matrix material satisfies $0.001 < w/(z+w) < 0.6$.

6. An electroluminescence panel comprising:

the phosphor thin film according to claim 1.

7. A method of manufacturing a phosphor thin film comprising:

forming a thin film by vapor deposition using a single vapor source including at least one element selected from the group consisting of Mg, Ca, Sr, Ba, and Zn, any of an oxide and a sulfide of at least one element selected from the group consisting of Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu, and a substance functioning as a luminescence center; and

annealing the formed thin film.